# Article information:

Frontiers | Aging Effects on Phonological and Semantic Priming in the Tip-of-the-Tongue: Evidence From a Two-Step Approach  
<https://www.frontiersin.org/articles/10.3389/fpsyg.2020.00338/full>

# Article summary:

1. Aging affects spoken production, with retrieval failures becoming more prevalent as people age.

2. Tip-of-the-tongue (TOT) is a common word-finding failure that increases with normal aging.

3. Semantic processing remains stable in old age, while there is an aging effect on phonological retrieval in spoken production. The transmission deficit hypothesis suggests that aging weakens the connection between semantic and phonological representations, resulting in a reduction in the transmission of semantic priming and making activation of phonological representations more difficult.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

The article "Aging Effects on Phonological and Semantic Priming in the Tip-of-the-Tongue: Evidence From a Two-Step Approach" provides an overview of the effects of aging on spoken production, specifically focusing on word-finding failures known as tip-of-the-tongue (TOT) states. The article discusses the asymmetries of semantic and phonological retrieval in old age and presents two possible explanations for these differences. The first explanation is the transmission deficit hypothesis (TDH), which suggests that aging weakens the connection between semantic and phonological representations, resulting in a reduction in the transmission of semantic priming and making activation of phonological representations more difficult. The second explanation is that TOTs are little associated with word's semantics.

The article provides a comprehensive review of previous studies on TOTs occurrence in young and older adults, highlighting discrepancies in findings regarding the aging of phonological encoding. However, there are some potential biases in this article that need to be addressed. Firstly, the article focuses primarily on studies that support the TDH hypothesis while ignoring other possible explanations for TOTs occurrence. For example, it does not consider alternative theories such as cognitive load theory or inhibition theory, which suggest that TOTs may occur due to interference from competing information or difficulty inhibiting irrelevant information.

Secondly, while the article acknowledges that semantic processing remains stable in old age, it does not explore potential limitations or changes in semantic processing abilities with age. For instance, older adults may experience difficulties with accessing specific details within their semantic memory due to declines in executive functioning or working memory capacity.

Thirdly, the article presents evidence for an aging effect on phonological retrieval but does not address potential confounding factors such as hearing loss or changes in speech production mechanisms with age.

Overall, while this article provides valuable insights into TOTs occurrence and its relationship with aging effects on spoken production, it would benefit from a more balanced discussion of alternative explanations and potential limitations in the evidence presented.

# Topics for further research:

* Cognitive load theory and tip-of-the-tongue states
* Inhibition theory and tip-of-the-tongue states
* Age-related changes in executive functioning and semantic processing
* Working memory capacity and semantic retrieval in older adults
* Hearing loss and phonological retrieval in aging
* Changes in speech production mechanisms with age

# Report location:

<https://www.fullpicture.app/item/9923381ff2398327a0a039bd6969b0cd>